CLINICAL CONUNDRUM IN THE TREATMENT OF EPTIFIBATIDE-INDUCED THROMBOCYTOPENIA FOLLOWING PERCUTANEOUS CORONARY INTERVENTION

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 9:45 a.m.-10:30 a.m.

Session Title: FIT Clinical Decision Making: Ischemic Heart Disease
Abstract Category: TCT@ACC-i2: Invasive Cardiovascular Angiography and Intervention
Presentation Number: 1180-170

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Background: Acute profound thrombocytopenia due to glycoprotein IIb/IIIa inhibitors is a rare but potentially devastating complication following percutaneous coronary intervention (PCI).

Case: A 61-year-old gentleman referred for PCI of a 90% right coronary artery stenosis was treated with overlapping drug eluting stents (DES). During the procedure, he received a bolus of unfractionated heparin, a double bolus of eptifibatide as well as 600 mg of clopidogrel. No eptifibatide infusion was used. Following femoral sheath removal, he developed a large groin hematoma, requiring 50 minutes of manual compression. Ecchymoses were also noted on the chest wall. Complete blood count (CBC) post-procedure revealed a 2 g/dL hemoglobin drop and platelet nadir of 8,000 (151,000 pre-procedure).

Decision Making: Differential diagnosis included eptifibatide-induced thrombocytopenia and pseudothrombocytopenia (PT), drug-induced thrombotic thrombocytopenic purpura (TTP) and heparin-induced thrombocytopenia (HIT). Peripheral blood smear revealed normal red blood cell morphology without schistocytes and marked thrombocytopenia without platelet clumping, making PT or TTP unlikely. The 4T score was 2, suggesting low probability of HIT. The patient's thrombocytopenia was presumptively treated as eptifibatide-induced. Aspirin and clopidogrel were continued without interruption and no platelet transfusion was administered. The platelet count increased to 26,000 nine hours post procedure and was 147,000 six days later.

Conclusion: Eptifibatide-induced thrombocytopenia is very rare (incidence <1%) and previously reported only with continuous, not bolus, infusions. As risk for acute thrombosis is highest in the immediate hours post stent implantation, the decision to withhold dual antiplatelet therapy or administer transfusions may prove deleterious. We pursued close observation with serial CBC monitoring and achieved a favorable clinical outcome.